

Pale Ale 20L

- Gravity **12.8 BLG**
- ABV ---
- IBU **50**
- SRM **5.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|-------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (98%) | 79 % | 6 |
| Grain | Strzegom Karmel 30 | 0.1 kg (2%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Citra | 10 g | 60 min | 13.5 % |
| Boil | Citra | 10 g | 25 min | 13.5 % |
| Boil | Simcoe | 10 g | 25 min | 13 % |
| Boil | Citra | 10 g | 10 min | 13.5 % |
| Boil | Simcoe | 10 g | 10 min | 13 % |
| Aroma (end of boil) | Amarillo | 15 g | 5 min | 9.5 % |
| Aroma (end of boil) | Citra | 15 g | 5 min | 13.5 % |
| Whirlpool | Simcoe | 10 g | 0 min | 13 % |
| Whirlpool | Amarillo | 15 g | 0 min | 9.5 % |
| Whirlpool | Citra | 10 g | 0 min | 12 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 9.5 % |
| Dry Hop | Citra | 30 g | --- | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale | Slant | 300 ml | Fermentis |